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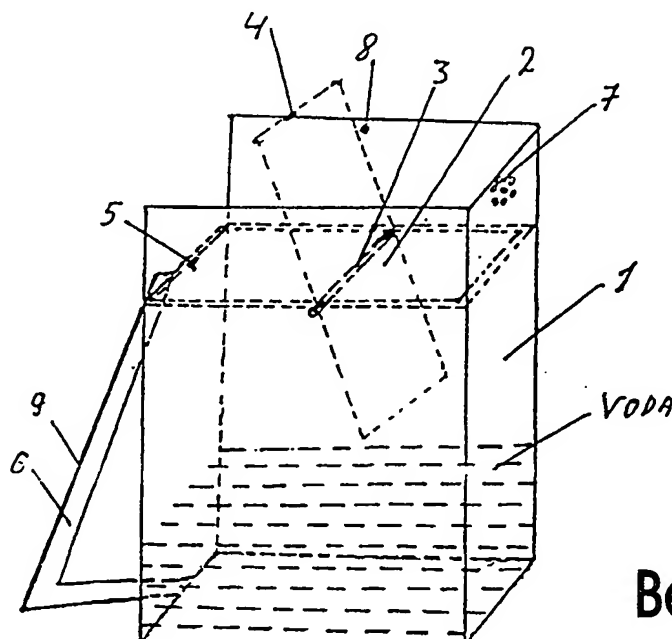
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ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: AUTOMATIC MOUSETRAP



(57) Abstract: The present invention relates to the automatic mousetrap that consists of container (1) in the shape of the box with three raised sides, with ramp (6) secured to it, on which is glued the band (9) of carpet. In the container (1) is placed smooth tilting plate (2), that is secured on the transversal axle (3), which is supported on the container (1). On the not raised side of the container (1) is placed the metal screw (5) opposite of which on the smooth tilting plate (2) is secured the magnet (4). On the side of the container (1) that is opposite to the not raised side of the container (1) is secured the bait (7), while on the side of the container (1) next to the not raised side of the container (1) is secured delimiter (8). With automatic mousetrap a few rodents can be caught successively, without the need for additional actions like: replacement of the bait, repeatedly activation of mousetrap or removing of the caught rodent.

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AUTOMATIC MOUSETRAP*Field of the invention*

The present invention relates to the automatic mousetrap and belongs to the field of
10 devices for destroying harmful animals, and more precisely it belongs to the field of
collecting traps with tipping platform.

According to IPC the invention is designated by A 01 M 23/04.

Technical problem

15

The present invention solves the problem how to construct the mousetrap which
can catch a few rodents successively, without the need for additional actions like:
replacement of the bait, repeatedly activation of the mousetrap or removing of the caught
rodent, while the mentioned mousetrap must be ecologically acceptable.

20

State of the art

From the state of the art are known many different mechanical, electrical and
chemical means for destroying harmful animals, and especially rodents.

25

Between the mechanical devices, the most commonly used type are wire cage
mousetraps with opening that is gradually narrowing to the inside of it. When mouse
attracted by the bait enter through the mentioned opening to the trap, he eats the bait, but
can't get out of it, that is, he is caught alive. It is necessary to immerse the mousetrap in the
container with water to drown the mouse, and than to remove it from the mousetrap and to
30 put the new bait in it, all of this represents disadvantages of the mentioned type of
mousetrap.

Another, very often used type of mousetrap is the mousetrap with spring, which
won't be described here in detail, and only its disadvantages will be mentioned: after
catching the rodent (which is instantly killed) it is necessary to remove it, and it is often
35 necessary to clean the mousetrap, as well as the place where it was placed because of the

5 presence of blood and body fluids of the caught rodent. Moreover, it is necessary to replace the bait and to stretch again the mousetrap to enable the catching of the next rodent. One should also bear in mind unpleasant view of the mousetrap with rodent caught in this way.

Concerning the electrical and chemical means for destroying rodents, the same can be dangerous for the environment (foremost for kids and animals), or to be unsuitable from
10 the ecological point of view.

Summary of the invention

The mousetrap according to the invention eliminates the disadvantages of afore
15 mentioned devices for destroying rodents. Its usage doesn't require replacement of the bait, because the rodent can't reach the bait once placed. On the other hand, after catching one rodent, it is not necessary to remove it or to activate mousetrap again for the next catching, because the mousetrap returns automatically to the starting position, which makes it ready for the next activation. The operation of the mousetrap is almost inaudible and its usage is
20 simple. It is especially suitable for places where usage of chemical means is not recommended or it is even forbidden, because it is ecologically absolutely acceptable.

Mousetrap according to the invention consists of container in the shape of the box with three raised sides, with ramp secured to it, on which is glued the band of carpet. Smooth tilting plate placed in the container is fastened on the transversal axle that is
25 supported on the container. Axis of the transversal axle is shifted from the middle axis of the container for 10% in direction opposite to the not raised side of the container. On the not raised side of the container the screw is placed opposite of which on the smooth tilting plate the magnet is secured. On the side of the container opposite to the not raised side, the bait is secured, while delimiter is secured on the side of the container next to the not raised
30 side of the container, so that the smooth tilting plate when resting on the delimiter is arranged at an angle of 65° to the horizontal plain.

5 *Brief description of the drawings*

Invention is described in more detail with a reference to an embodiment shown in the drawings where:

Fig. 1 shows a perspective view of automatic mousetrap, and

10 Fig. 2 shows a cross-sectional view of automatic mousetrap from Fig. 1 in smaller scale.

Detailed description of the invention

15 Automatic mousetrap according to the invention consists of container 1 in the shape of the box with three raised sides, that makes passage which is open to the one side only, and can be made from different materials, such as plastic, wood, metal or other, and in different sizes. Container 1 is partially filled with liquid, preferably water, to which in winter, if the mousetraps are installed in not heated spaces, eventually can be added anti-
20 freezing agent. Ramp 6 is secured to the not raised side of the container 1 or it is molded in one piece with the latter. On the ramp 6 is glued the band 9 of carpet. In the container 1 is placed smooth tilting plate 2, that is secured to the transversal axle 3, that is supported on the container 1 in such a way that the axis of the transversal axle 3 is shifted from the middle axis of the container for 10% in direction opposite to the not raised side of the
25 container 1, so that the mass center of the plate 2 is shifted with respect to its central axis. On the not raised side of the container 1 the metal screw 5 is placed opposite of which on the tilting plate 2 the magnet 4 is secured so that the screw 5 and magnet 4 keep the smooth tilting plate 2 in horizontal position in container 1. The intensity of the afore mentioned force can be regulated by rotating screw 5, that changes the distance of its head from the
30 magnet 4, and preferably should be such that rotation of the plate 2 begins when the rodent passes the transversal axle 3 for the distance equal to its body length. On the side of the container 1, that is opposite to the not raised side, the bait 7 is secured, while delimiter 8 is secured on the side of the container 1 next to the not raised side of the container 1, so that the smooth tilting plate 2 in position when resting on the delimiter is arranged at an angle
35 of 65° to the horizontal plain. In this way its further rotation at an angle of 90° to the horizontal plain is prevented, that is it's taking the position that is not operable.

5 Automatic mousetrap functions in the following way: rodent that scent out the bait
7, climbs to the ramp 6 walking on the band of carpet 9 that prevents it from slipping down
from the ramp 6 and passes to the smooth tilting plate 2 in the container 1. During the
further movement, it is going to the bait 7 on the opposite side of the container 1 passing
the transversal axle 3 and when it passes the distance from it that is approximately equal to
10 its body length, plate 2 tilts down, because the weight of the rodent for the moment
overwhelms the magnetic attraction force between screw 5 and the magnet 4, so that the
rodent slips down from the smooth tilting plate 2 into the liquid in the container 1 and
drowns. Further tilting of the plate 2 is prevented by its leaning on delimiter 8. Because of
the shifted mass center with respect to the middle axis, than plate 2 returns to the starting
15 position and mousetrap is ready for the next catch.

5

Claims

1. Automatic mousetrap that consists of container (1) in the shape of the box with three raised sides, with ramp (6) secured to the its not raised side or molded in one piece with it, on which ramp (6) is glued the band (9) of carpet, *characterized by* that in the container (1), which is partially filled with fluid, is placed smooth tilting plate (2), that is secured on the transversal axle (3), that is supported to the container (1) in such a way that the axis of the transversal axle (3) is shifted from the middle axis of the container (1) for 10% in direction opposite to the not raised side of the container (1), while on the not raised side of the container (1) the screw (5) is placed opposite of which on the smooth tilting plate (2) the magnet (4) is secured, while on the side of the container (1) that is opposite to the not raised side of the container (1) the bait (7) is secured, and on the side of the container (1) next to the not raised side of the container (1) delimiter (8) is secured.
2. Automatic mousetrap according to claim 1, characterized by that, that smooth tilting plate (2) when it rests on the delimiter (8) is arranged at an angle of 65° to the horizontal plain.
3. Automatic mousetrap according to claim 1 and 2, characterized by that to the liquid in the container (1), that is preferably water, can be added anti-freezing agent.

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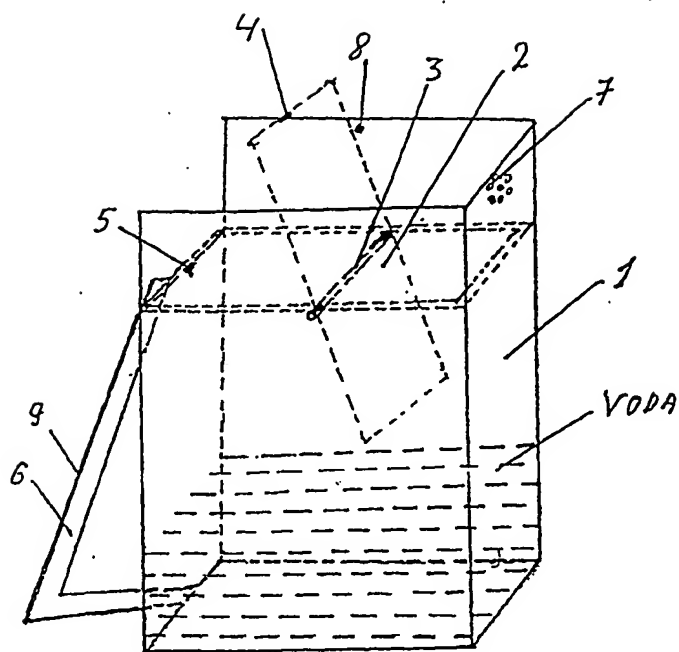


Fig. 1.

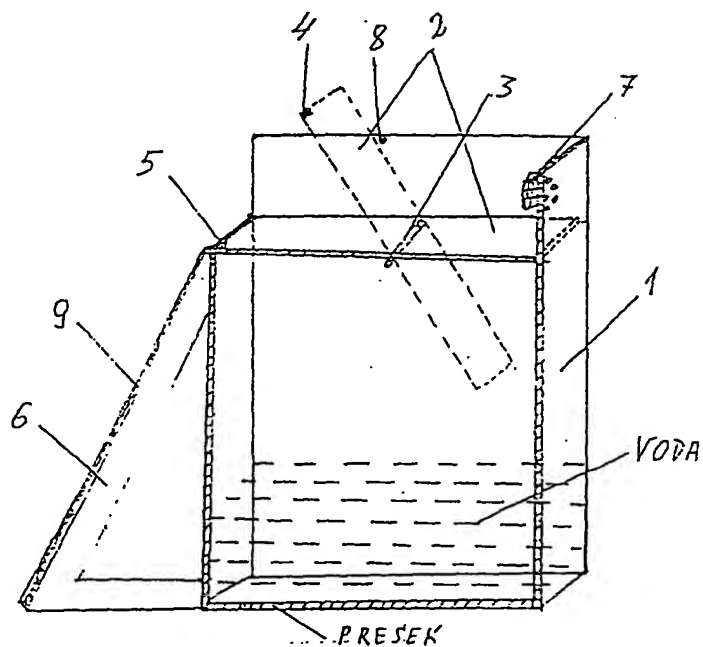


Fig. 2

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 A01M23/08 A01M23/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A01M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2 835 070 A (GOMEZ) claims; figures	1
X	US 4 241 531 A (NELSON ALFRED O ET AL) 30 December 1980 (1980-12-30) column 1, line 58 -column 2, line 62 claims; figures	1,3
X	DATABASE WPI Section PQ, Week 199737 Derwent Publications Ltd., London, GB; Class P14, AN 1997-400764 XP002181495 & RU 2 072 778 C (POSMETEV V I), 10 February 1997 (1997-02-10) abstract	1

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INTERNATIONAL SEARCH REPORT

Int. Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 876 821 A (BENZIE PAUL) 31 October 1989 (1989-10-31) claims; figures -----	1
X	GB 160 298 A (FREDERICK MONTAGUE) 24 March 1921 (1921-03-24) claims; figures -----	1

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Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2835070	A	NONE	
US 4241531	A	30-12-1980	NONE
RU 2072778	C	10-02-1997	RU 2072778 C1 10-02-1997
US 4876821	A	31-10-1989	NONE
GB 160298	A	24-03-1921	NONE

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